

ABSTRACT OF THE DISCLOSURE

In order to reduce the time required for error correction in the error correction device, data are transferred from the buffer memory not only to the syndrome calculator but also to the error detector at the same time, and until the syndrome calculator detects an error-containing code, the error detector performs error detection in parallel with the syndrome calculation done by the syndrome calculator. In the error detection after the error corrector corrects the error, the mid-term results of the error detection obtained before the error-containing code is detected are used. Consequently, it becomes unnecessary to transfer all data from the buffer memory to the error detector, thereby making it possible to execute error detection process at a halfway point.

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